### NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

### FACT SHEET

(pursuant to NAC 445A.236)

<u>Permittee Name</u>: Sierra Pacific Power Company - North Valmy Power Plant P.O. Box 10100 (6100 Neil Road, M/S S4BOB Reno, Nevada 89520

Permit Number: NEV96015

<u>Description of Discharge</u> Cooling water, boiler blowdown water, equipment sumps, floor drains and wash water, clarifier water, filter backwash, stormwater runoff/coal pile runoff, ash dewatering water and plant domestic wastewater (sewage) to the evaporation ponds. Cooling water is used for dust suppression on the plant site roads.

**Location**: North Valmy Power Plant 500 megawatt Generating Station

North of Valmy, Nevada, I-80 Stonehouse exit Latitude: 40° 53' N; Longitude: 117° 10' W

Section 14, T. 13N., R. 25E. MDB&M

**Humboldt County** 

# **Characteristics**:

Flow: 0.576 MGD limit

### Outfalls:

Outfall 001 - Pond A, Outfall 002 - Pond B, Outfall 003 - Pond C, Outfall 004 - Pond D, Outfall 005 - Pond E

Parameters: Monitored Quarterly; Annualy for PP Metals

TDS, BOD<sub>5</sub>, TSS, pH, Fecal Coliform, Oil and Grease, TPH, Total Nitrogen as N. and a Priority Pollutant Metals Scan.

Since first being permitted in January 1998 until the third quarter of 2000 there were 9 reported exceedences of pH greater than the 10.0 SU permit limit, and ranging from 10.1 to 10.59 SU units.

<u>General</u>: Sierra Pacific Power Company (SPPC) operates the North Valmy Power Plant 24 hours a day with a staff of 110. The North Valmy power plant consists of two 250 megawatt, coal-fired steam-electric generation facilities. There are two units with one cooling tower unit each; cooling water is supplied from the Valmy (SPPC) well field and the Lone Tree Mine dewatering project. This cooling water is recirculated. Each plant consists

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of a coal-fired boiler, a turbine-generator unit, a baghouse for particulate control, a 500 foot stack, a mechanical-draft cooling tower, and a water supply. Additionally there is a coal storage, supply and handling system; five lined evaporation ponds for wastewater disposal; a fire protection system; a landfill for ash disposal; rail facilities; roads; transmission facilities; a warehouse and a main administration building.

The five evaporation ponds are about 25 acres each and approximately 8 feet deep. Ponds A-C, the primary ponds, are Hypalon lined with asphalt reinforcement on the sidewalls, and ponds D-E, the secondary ponds are double lined with clay and 60 mil HDPE. Piping interconnnects each pond for efficient pond management and maintenance. The ponds are fenced and designed to have a zero-discharge standard of performance.

The Permittee has applied for renewal of the permit to discharge the facility wastestreams to the five evaporation ponds for disposal. Domestic sewage generated on site is discharged to the ponds for disposal. The water supply for the plant operations is provided by a network of deep wells located 5 to 15 miles east of the plant site, and by water imported from the Lone Tree Mine dewatering project.

Receiving Water Characteristics: Shallow groundwater meets drinking water standards. This aquifer is perched over clay and basalt at a depth of about fifty feet. The basalt flow functions as an aquatard, confining the deep aquifer (300') below it. Mine dewatering affects the depth of the shallow aquifer in the vicinity of the power plant. There are three downgradient monitoring wells (MW1 - 3) installed for leak detection and water quality monitoring. Currently monitoring wells 1 and 2 are dry due to regional drought and dewatering activities at the Lone Tree Mine.

## **Procedures for Public Comment:**

The notice of the Division's intent to issue a permit authorizing the facility to discharge to the surface water of the evaporation ponds subject to the conditions contained within the permit, is being sent to the **Reno Gazette-Journal and Humboldt Sun** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of the public notice, by February 28, 2005. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, or any interested agency, person or group of persons.

The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

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Any public hearing scheduled by the Administrator must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

## **Proposed Determination**

The Division has made the tentative determination to reissue the proposed permit for a period of five (5) years..

# Proposed Effluent Limitations, Schedule of Compliance and Special Conditions

Flow: 0.576 MGD

TDS: Monitor and Report BOD<sub>5</sub>: Monitor and Report TSS: Monitor and Report

pH: Between 6.0 and 10.0 S.U.

Fecal Coliform: Monitor and Report
Oil and Grease: Monitor and Report
TPH: Monitor and Report
Total Nitrogen as N: Monitor and Report

**Priority Pollutant** 

Metals Scan: Monitor and Report

1. antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, zinc.

## **Rationale for Permit Requirements**

Groundwater Monitoring is required to ensure that groundwater quality is not adversely affected, and pond monitoring is required to ensure proper operation of the ponds, and, to characterize the water contained in the evaporation ponds.

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Prepared by: Icyl Mulligan (11/04)